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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,834	02/28/2006	Masahiko Ando	50045979X00	3079

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ARLINGTON, VA 22209-3873

EXAMINER
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SEFER, AHMED N

ART UNIT	PAPER NUMBER
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2826

MAIL DATE	DELIVERY MODE
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04/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/569,834	<b>Applicant(s)</b> ANDO ET AL.	
	<b>Examiner</b> Ahmed Sefer	<b>Art Unit</b> 2826	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
     4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                        |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/28/06, 11/27/06 and 8/28/07</u> . | 6) <input type="checkbox"/> Other: _____.  |

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath/declaration filed on 02/28/2006 is acceptable.

### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) and the certified copy has been filed.

### ***Information Disclosure Statement***

3. The Information Disclosure Statement(s) filed on 2/28/2006, 11/27/2006 and 8/28/2007 have been considered.

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "3" and "4" have both been used to designate the insulating film (see page 26, lines 6-13). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

5. Claim 7 objected to because of the following informalities: The preamble, "RFID" should read "Radio Frequency Identification (RFID)". Appropriate correction is required.

Appropriate correction is required.

***Election/Restrictions***

6. Applicant's election without traverse of Group I (claims 1-8 and 11) in the reply filed on 1/15/2008 is acknowledged.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-8 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of claim 1 calling for, "an insulating film having lyophobic/lyophilic regions" is not well understood. Since both lyophobic and lyophilic regions are being recited, the term "lyophobic/lyophilic" which is interpreted to mean lyophobic or lyophilic is confusing.

Claim 3 recites the limitation "the semiconductor films." There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the upper electrodes." There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the connection parts." There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the ring-shaped openings." There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the separations." There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the photosensitive lyophobic film." There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-3, 6-8 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Hirai ("Hirai") US PG-Pub 2004/0129978.

Hirai discloses in figs. 1 and 3 an electrode substrate in which a lower electrode 2, an insulating film 2a having lyophobic/lyophilic regions on a surface thereof and an upper electrode 4/5 are layered sequentially on a substrate, characterized in that: the lower electrode has a pattern approximately aligned with that of the lyophobic region 6 (fig. 3-3) on the surface of the insulating film; the upper electrode is formed mainly on the lyophilic region (region away from region 6) other than the lyophobic region on the surface of the insulating film; and the upper

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electrode has a self-aligned pattern in which the pattern of the lower electrode is approximately inversed.

Re claim 2, Hirai discloses a thin film transistor comprising the electrode substrate according to claim 1 and a semiconductor film 3, wherein the electrode substrate is characterized in that a gate electrode 2 is formed as the lower electrode, and a source electrode 5 and a drain electrode 4 are formed as the upper electrode on two or more areas of the lyophilic region separated by the lyophobic region formed on the surface of the insulating film in a pattern approximately aligned with that of the lower electrode so that the upper electrode has, in a self-alignment manner, an approximately inversed pattern of the gate electrode as the lower electrode, the thin film transistor being characterized in that: the semiconductor film is formed so that the semiconductor film covers and extends across at least a part of each of the following members on said electrode substrate: the source electrode, drain electrode and the surface of the insulating film (the gate electrode region) interposing therebetween.

Re claim 3, Hirai discloses in figs. 2 and 9-14 an active matrix thin film transistor substrate comprising the electrode substrate according to claim 1 and thin film transistors 14, wherein in the electrode substrate, a plurality of gate wirings/electrodes 2/11 are formed as the lower electrode, and a plurality of signal wirings 12, a plurality of source/drain electrodes and a plurality of pixel electrodes 4a are formed as the upper electrodes on a plurality of areas of the lyophilic region separated by the lyophobic region formed on the surface of the insulating film in a pattern that is approximately aligned with that of the lower electrode, wherein the semiconductor films of the thin film transistors are formed so that the semiconductor films extend to cover astride at least a part of each of the following members on the electrode

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substrate: the source electrodes, drain electrodes and lyophobic regions (gate wiring/electrode regions), on the surface of the insulating film, interposing between the source electrodes and the drain electrodes, and wherein the thin film transistors are each disposed at any one of the intersection portions between the gate wiring and signal wiring.

Re claim 6, Hirai discloses liquid crystal, electrophoresis, or organic electroluminescence display device (paragraphs 3 and 140), characterized by using the thin film transistor substrate according to any one of claims 3 to 5 as an active matrix switch.

Re claim 7, Hirai discloses an RFID device, characterized by using the thin film transistor according to claim 2 as at least a part thereof. Note the term, "RFID" has not been given patentable weight because the recitation occurs in the preamble

Re claim 8, Hirai discloses electrode substrate, thin film transistor and active matrix thin film transistor substrate, according to claims 1 to 3, characterized by using a photosensitive lyophobic monolayer film comprising a carbon chain in which at least a part thereof is terminated with a fluorine or hydrogen atom as a photosensitive lyophobic film (paragraphs 153, 160 and 428).

Re claim 11, Hirai discloses that at least one of the substrate and the insulating film is formed with a material that does not transmit a light having a photosensitive wavelength of the photosensitive lyophobic film (paragraphs 4, 153, 160, 242, and 428).

### ***Double Patenting***

11. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v.*

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*Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

12. Claims 1-8 and 11 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-8 and 11 of prior U.S. Patent No. 7,102,155. This is a double patenting rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ahmed Sefer whose telephone number is (571)272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Purvis can be reached on (571) 272-1236.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. Sefer/  
Primary Examiner  
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